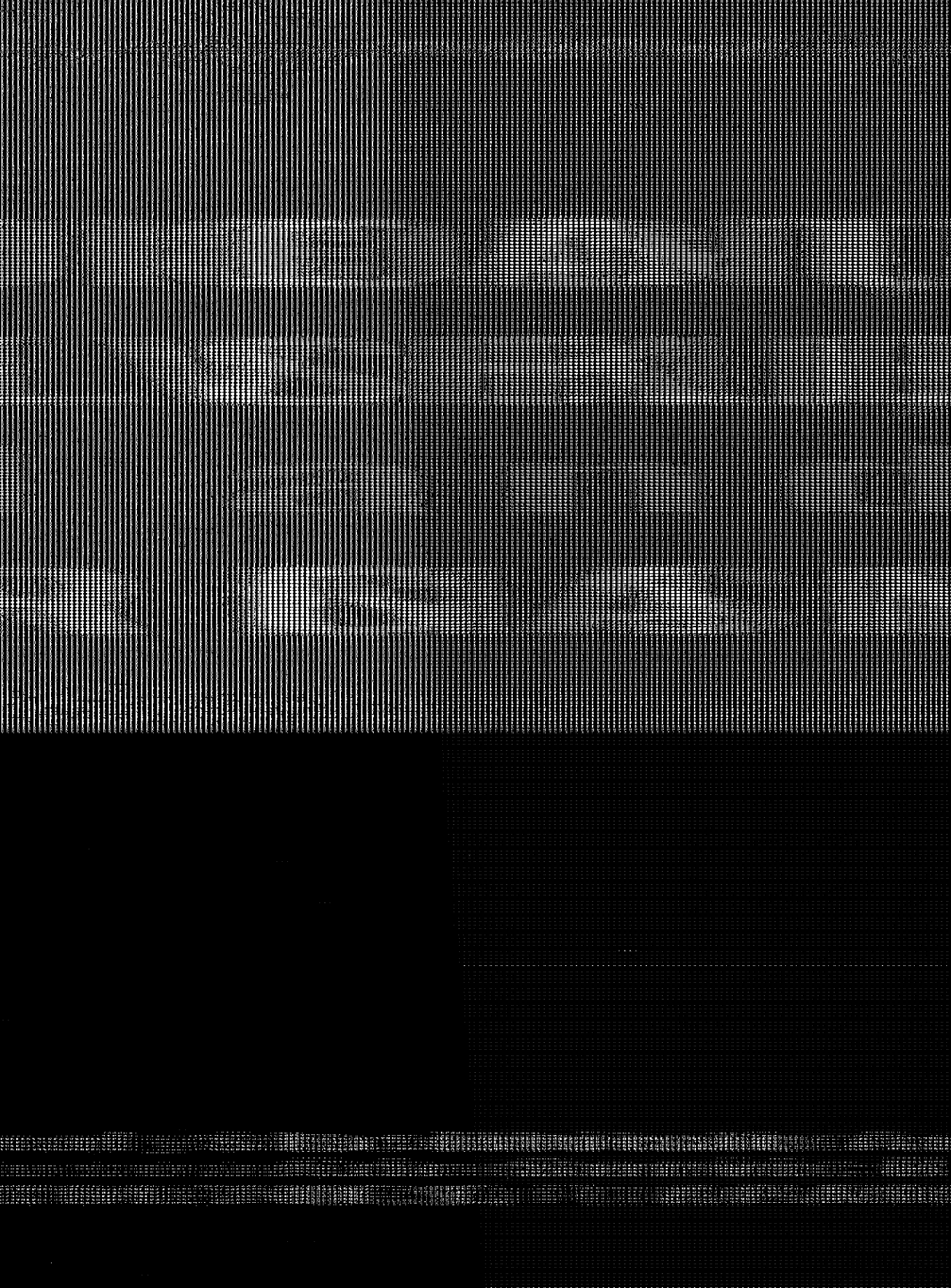

PREFACE

As part of a research program dating from 1945, the U. S. Department of Agriculture has published information on the numbers, characteristics, and earnings of persons hired to work on U. S. farms during a given year. This information is collected for the Economic Research Service by the Bureau of the Census in conjunction with the Current Population Survey. For the first time, information was obtained in the December 1961 Current Population Survey on the skill level of farm and nonfarm jobs performed by farm wage workers. This information, plus data on the educational attainment and other characteristics of farm wage workers, supply the basis of this report.

CONTENTS

March 1963

SUMMARY AND IMPLICATIONS

1. In December 1961, 73 percent of all adult farm wage workers (those 25 years old and over) had no more than a grade school education (8 or fewer years of school completed). About 3 out of 10 adult farm wage worker were functionally illiterate (had completed fewer than 5 years of school) and only 1 out of 7 was a high school graduate. In general, data on educational attainment were in close agreement with data obtained in the February 1961 Current Population Survey (CPS).

2. The highest proportions of functional illiterates were among workers 45 years old and over and among nonwhites. Over 60 percent of older nonwhite males had completed fewer than 5 years of school.

3. The proportion of functionally illiterate whites in the hired farm working force was higher than in the rural-farm population, whereas the proportion of functionally illiterate nonwhites was about the same.

4. Among males who did 25 days or more of farm wage work, there were no significant differences in average daily wages or annual earnings from farm wage work between those 25 to 44 years old and those 45 years old and over. The data suggest that educational attainment was more closely related to farm wages and earnings than was age.

5. The kinds of farm and nonfarm jobs of a majority of male regular and seasonal workers (those who did 25 days or more of farm wage work) were those requiring a minimum of skill and education. For 63 percent, the highest skilled farm job reported was that of hand or stoop laborer (32 percent) or tractor or truck driver (31 percent); 51 percent reported their highest paid nonfarm job as that of nonfarm laborer or service worker.

6. Males with the highest skilled farm jobs earned higher daily wages and had steadier employment than other farm wage workers. Differences in average daily wages among other skill levels were minor, but there were substantial differences in the number of days worked. Intermittent seasonal work for hand or stoop laborers resulted in very low annual earnings.

7. Among Southern workers with similar educational backgrounds and with similar farm jobs, whites received about $1 a day more at farm wage work than did nonwhites.

8. Higher nonfarm earnings of male regular and seasonal workers were related to the type of nonfarm occupation and to educational attainment. Males in higher status occupations (white-collar workers, craftsmen, and operatives), about 60 percent of whom had completed at least one year of high school, had more days of nonfarm work and earned about 25 percent more per day than those in lower status occupations (service workers and nonfarm laborers), about 60 percent of whom had no more than a grade school education.

Results show that most farm wage workers are concentrated in jobs--whether farm or nonfarm--requiring little or no training and education. The lowest-skilled farm jobs pay low wages, are highly seasonal, and are performed by workers from the least-educated segment

of the population. There is, however, a small group of more highly skilled farm wage workers who have steady employment, earn comparatively high farm wages, and, on the average, have more schooling than other farm wage workers.

What do these results, viewed in the light of other developments, imply for the employment opportunities available to farm wage workers? It seems certain that as the educational level of the population rises and as educational requirements for nonfarms jobs become more stringent, workers with a low level of education will face increasing difficulty in obtaining employment--particularly in an economy with a moderately high rate of unemployment. Proportionately fewer nonfarms jobs are available to unskilled workers with little training or education, and it may be that farm wage work is one of the largest single major occupations open to unskilled workers. It is also likely that younger skilled workers will be increasingly drawn to nonfarm employment which generally offers higher wages, steadier employment, a greater number of fringe benefits, and a greater degree of protection against the risk of unemployment.

Additional data on skills of farm wage workers would be helpful in assessing more precisely increases in productivity attributable to the employment of workers with higher levels of education and skill and in determining whether the increasing mechanization of agriculture is accompanied by changes in the types of farm jobs at which farm wage workers are employed.

EDUCATION, SKILL LEVEL, AND EARNINGS OF THE HIRED FARM WORKING FORCE OF 1961 1/

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INTRODUCTION

This is the second of two bulletins dealing with the educational attainment of farm wage workers (1). 2/ Information obtained in the December 1961 Current Population Survey (CPS) is used to describe the educational level of the hired farm working force of 1961.

In this report, attention is focused on the relationships between kinds of farm and nonfarm jobs and educational attainment. 3/ Major emphasis is placed on the educational attainment, earnings, and work experience of males who did 25 days or more of farm wage work in 1961 (referred to as regular and seasonal workers) and who accounted for over 80 percent of all days of hired farm labor in 1961.

1/ This report was prepared under the general direction of Louis J. Ducoff, Chief, Farm Population Branch.

The special questions on farm and nonfarm jobs were developed by Ducoff and Sheridan T. Maitland, formerly of the Farm Population Branch, in consultation with farm labor specialists in the Department of Agriculture and other Federal agencies. Earle J. Gerson and Daniel B. Levine of the Demographic Surveys Division of the Bureau of the Census cooperated in the planning of the survey.

2/ Underscored figures in parentheses refer to items in Literature Cited, p. 21.

3/ More detailed analysis of the data obtained in December 1961 is being prepared for publication as an Agricultural Economic Report entitled "The Hired Farm Working Force of 1961."

EDUCATIONAL ATTAINMENT OF THE HIRED FARM WORKING FORCE, 1961

As previous reports (3, 1) have shown, the occupation of farm wage worker ranks among the lowest of all major occupation groups on measures of earnings and education. Reiss (6) gives comparative data on the socioeconomic status of the farm wage worker. In December 1961, almost 3 out of 10 farm wage workers 25 years old and over were functionally illiterate and only about 1 in 7 had completed high school (table 1). 4/

On the average, farm wage workers 25 years old and over had completed about 2 years less of school than all rural residents of similar age, and about 4 years less than urban residents. 5/ The hired farm working force resembled the rural-farm population in the proportion with 5 to 8 and 9 to 11 years of school completed, but there were proportionately about 2-1/2 times more farm wage workers than rural-farm residents with less than 5 years of schooling. If all farm wage workers in 1961 had been rural residents in 1960, then about 17 percent of all rural functional illiterates were employed as farm wage workers in 1961. 6/

Detailed data on age, educational attainment, and other characteristics of the 3.3 million persons who did farm wage work in 1961 show clearly the relationship between age and educational attainment (table 2). 7/ Workers aged 18 to 24 had completed an average of about 11 years of school whereas workers 45 years old and over had completed an average of only about 6 years of school. The close relationship between age and educational attainment reflects the extent of changes in the general level of education in the United States over the past years. For example, among workers 45 years old and over, who attended school a generation or more ago, only 1 in 12 had completed high school and about 4 out of 10 had completed less than 5 years of school. In contrast, among workers 18 to 24 years old, the current generation, well over a third had at least a high school education and only 1 in 20 had failed to complete at least 5 years of school.

4/ The term "functional illiterate" refers to persons who had completed fewer than 5 years of school. See the section: A Note on the Term Functional Illiteracy.

5/ In February 1960, the latest date for which data are available on residence of the hired farm working force, 86 percent of all regular and seasonal workers were rural residents and 47 percent were rural-farm residents.

6/ In April 1960, about 3.1 million rural residents 25 years old and over had completed less than 5 years of school (10, p. 207) and in December 1961, about 525,000 farm wage workers 25 years old and over had completed less than 5 years of school. The proportion of the functionally illiterate rural labor force employed as farm wage workers in 1961 was probably higher than 17 percent, but information is not available in the detail required to estimate the proportion.

7/ As indicated in footnotes to the tables, persons for whom years of school completed was not reported were excluded from the analysis. Reports on years of school completed were received for about 96 percent of all workers, and the exclusion of nonreports does not affect the results of the analysis. Information on the total hired farm working force (about 3.5 million persons) is contained in The Hired Farm Working Force of 1961, in preparation for publication as an Agricultural Economic Report.

Table 1.--Percentage distribution: Years of school completed by persons 25 years old and over in general population, by residence, 1960, and by farm wage workers, United States 1961

Persons 25 years old and over	Years of school completed					Median
	Total	0-4	5-8	9-11	12 or more	
	Pct.	Pct.	Pct.	Pct.	Pct.	Yrs.
Total	100.0	8.3	31.4	19.2	41.1	10.6
Urban	100.0	7.3	28.7	19.8	44.2	11.1
Rural	100.0	11.0	38.1	17.7	33.2	9.2
Nonfarm	100.0	10.9	36.1	18.5	34.5	9.5
Farm	100.0	11.3	43.6	15.6	29.5	8.8
Farm wage workers 1/	100.0	28.6	44.1	13.0	14.3	6.9

1/ Excludes persons for whom years of school completed was not reported.

Data on general population from: U. S. Bureau of the Census. 1960 Census of Population, Advance Reports. General Social and Economic Characteristics PC (A-3)-1, United States, p. 5 table 100. Data on farm wage workers from December 1961 Current Population Survey.

CHARACTERISTICS OF FUNCTIONAL ILLITERATES

Information on the characteristics of persons at the extremes on educational attainment shows that of the five characteristics examined, age and color were most close associated with a low level of education (table 3). About a fourth of all workers, but well over half of all workers with less than 5 years of school were 45 years old or over; 34 percent of all workers, but 56 percent of all functional illiterates, were nonwhite. The rate of functional illiteracy was twice as high for older males as for all workers. Over 60 percent of all older nonwhite males had completed less than 5 years of school (table 4). Older males comprised 19 percent of the total hired farm working force but accounted for 42 percent of all farm wage workers with less than 5 years of school.

Comparisons of the educational attainment of persons 25 years old and over suggest that educational differences between white farm wage workers and the white farm population are greater than those for nonwhites. Data from the 1960 census show that among rural-farm males 25 years old and over, 52 percent of nonwhites and 10 percent of white were functionally illiterate (10, p. 207). Among farm wage workers 25 years old and over in 1961, 51 percent of nonwhite males and 20 percent of white males were functionally illiterate.

Table 2.--Percentage distribution: Years of school completed by farm wage workers by age and selected characteristics, United States, 1961

Selected characteristics by age	Workers 1/	Years of school completed					Median years of school completed
		Total	0-4	5-8	9-11	12 and over	
	Thous.	Pct.	Pct.	Pct.	Pct.	Pct.	Yrs.
All workers	3,341	100.0	100.0	17.3	40.5	26.7	15.5	8.2
14-17 years	837	25.1	100.0	2.2	44.1	52.9	0.8	9.2
18-24	671	20.1	100.0	5.1	26.5	31.4	37.0	10.8
25-44	964	28.8	100.0	20.7	42.5	17.1	19.7	7.8
45 and over	868	26.0	100.0	37.5	45.7	8.5	8.3	6.1
Workers who did less than 25 days of farm wage work	1,544	100.0	100.0	14.0	41.7	29.9	14.4	8.5
14-17	518	33.6	100.0	0.3	43.3	56.0	0.4	9.3
18-24	288	18.6	100.0	1.1	26.7	33.1	39.1	11.0
25-44	412	26.7	100.0	20.2	46.3	12.9	20.6	7.6
45 and over	326	21.1	100.0	39.2	46.7	7.0	7.1	5.9
Workers who did 25 days or more of farm wage work	1,797	100.0	100.0	20.1	39.5	24.0	16.4	8.0
14-17	319	17.8	100.0	5.2	45.5	47.8	1.5	8.9
18-24	384	21.4	100.0	8.1	26.3	30.1	35.5	10.6
25-44	553	30.7	100.0	21.1	39.6	20.2	19.1	7.2
45 and over	542	30.1	100.0	36.5	45.2	9.3	9.0	6.2
Nonmigratory	2,980	100.0	100.0	17.1	40.8	26.7	15.4	8.2
14-17	761	25.5	100.0	1.7	43.3	54.1	0.9	9.3
18-24	597	20.1	100.0	4.8	27.2	31.3	36.7	10.7
25-44	846	28.4	100.0	19.9	43.1	15.9	21.1	7.8
45 and over	776	26.0	100.0	38.7	46.4	7.9	7.0	6.0
Migratory	361	100.0	100.0	18.7	38.7	26.6	16.0	8.2
14-24	150	41.7	100.0	7.0	37.2	36.5	19.3	9.5
25 and over	211	58.3	100.0	27.1	39.8	19.5	13.6	7.3

1/ Excludes persons for whom years of school completed was not reported. Figures for workers rounded to nearest thousand without adjustment to totals.

Table 3.--Percent of all farm wage workers and of workers with 0-4 and 12 and over years of school completed by selected characteristics, United States, 1961

Selected characteristics	Farm wage workers 1/		
	Years of school completed		
	Total	0-4	12 and over
Number (thousands)	3,341	578	517
Sex	100.0	100.0	100.0
Male	69.7	69.4	75.2
Female	30.3	30.6	24.8
Age	100.0	100.0	100.0
14-17 years	25.1	3.2	1.3
18-24	20.1	5.9	48.0
25-44	28.8	34.6	36.8
45 and over	26.0	56.3	13.9
Color	100.0	100.0	100.0
White	65.8	43.9	79.6
Nonwhite	34.2	56.1	20.4
Migratory status	100.0	100.0	100.0
Migratory	10.8	11.7	11.2
Nonmigratory	89.2	88.3	88.8
Duration of farm wage work	100.0	100.0	100.0
25 days or less	46.2	37.3	43.0
25 to 149	34.0	35.5	34.4
150 to 249	7.9	12.4	6.6
250 and over	11.9	14.8	16.0

1/ Excludes persons for whom years of school completed was not reported.

Table 4.--Percent of male farm wage workers 45 years old and over with 0-4 and 12 or more years of school completed, United States 1961

Workers 1/	Number	Percent	Years of school completed		
			Total	0-4	12 or more
	Thou.	Pct.	Pct.	Pct.	Pct.
All workers	3,341	100.0	100.0	17.3	15.5
Males, 45 years old and over	635	19.0	100.0	38.2	9.2
White	434	13.0	100.0	37.4	11.2
Nonwhite	201	6.0	100.0	63.0	5.0

1/ Excludes persons for whom years of school completed was not reported.

This suggests that functionally illiterate nonwhites comprise about the same proportion of the hired farm working force as they do of the nonwhite rural-farm population, whereas functionally illiterate whites are represented more heavily in the hired farm working forces. 8/

REGULAR AND SEASONAL MALE FARM WAGE WORKERS

From both an economic and social viewpoint the most important members of the hired farm working force are persons who contribute a major share of total hired labor and who are largely dependent on farm wage employment for their livelihood. For this reason, the remainder of this report is focused on males who were regular or seasonal farm wage workers in 1961, i.e., those who did 25 days or more of farm wage work. These workers comprised about 54 percent of all hired farm workers but accounted for 84 percent of all the days of hired farm wage work reported in 1961. Male regular workers, those with at least 150 days of farm wage work in 1961, made up less than a fifth (18.5 percent) of all workers but accounted for over three-fifths (64 percent) of all days of farm wage work. 9/

AGE, EDUCATION, AND EARNINGS

The close association between age and education means that age must be considered when examining relationships between education and earnings.

Younger male workers, those 14 to 17 years old, worked an average of only 77 days at wage work in 1961, almost all at farm wage work (table 5). Their low average daily farm wages ($3.60) may reflect work for only part of a day as well as low wage rates. Many of these young people were enrolled in school for most of the year and were employed during vacation periods.

Males 25 years old and over were employed an average of about 42 five-day weeks during the year and averaged 37 weeks at farm wage work. The small number of regular workers with 9 or more years of schooling does not permit a more detailed analysis of the inter-relationships among age, education, and earnings. The data available, however, do suggest that among both older and younger workers, those with at least 9 years of school earned higher wages than did workers with less than 9 years of schooling. In part, at least, the differences in earnings between younger and older workers reflects the higher wages paid to workers with 9 or more years of school completed, two-thirds of whom were aged 25 to 44. Daily wages varied with education--functionally illiterate workers averaged $6.40 per day of farm wage work whereas workers with at least 9 years of schooling earned an average of about $10.00 per day. Among adult male farm wage workers, those with at least a year of high school were more fully employed in 1961 than workers with less schooling.

8/ The data available do not provide conclusive evidence for this suggestion. A detailed comparison would require information on the age, color, sex, and educational attainment of the labor force--rather than on the general population. In addition, not all farm wage workers would be classed by the census as members of the rural-farm population; however, all farm wage workers are at least part-time members of the farm labor force.

9/ These proportions were computed from data on all persons reporting farm wage work and include workers for whom information on years of school completed was not reported.

Table 5.--Average days worked and average earnings at farm and nonfarm wage work by males who did 25 days or more of farm wage work, by age and years of school completed, United States, 1961

Age and years of school completed	Number of workers 1/		Farm and nonfarm wage work			Farm wage work		
	Thousands	Percent reporting nonfarm work	Average days worked	Average earnings		Average days worked	Average earnings	
				Per year	Per day worked		Per year	Per day worked
			Number	Dollars	Dollars	Number	Dollars	Dollars
Males	1,390	26.7	177	1,280	7.20	155	1,081	7.00
14-17 years	234	19.5	77	271	3.50	70	251	3.60
18-24 years	331	37.9	168	1,070	6.35	131	748	5.70
0-8	2/114	25.3	165	901	5.45	147	727	4.95
9 and over	216	44.5	170	1,160	6.80	123	759	6.15
25 years and over	825	24.2	209	1,650	7.90	188	1,451	7.70
0-4	235	18.1	191	1,225	6.40	180	1,151	6.40
5-8	359	26.2	209	1,532	7.30	184	1,302	7.05
9 and over	231	27.5	229	2,266	9.90	203	1,987	9.80

1/ Excludes persons for whom years of school completed was not reported.

2/ Averages based on less than 150,000 persons.

Other characteristics of the worker, the specific job preformed, and the area and time of year in which the worker was employed are important influences on wage rates, and differences in earnings cannot be attributed solely to differences in education. It is clear, however, that among adult males--who averaged 188 days of farm wage work during the year--those with the most schooling earned substantially higher daily wages, averaged more days of wage employment, and consequently had substantially higher annual earnings than did workers with less schooling. The comparatively high economic returns to workers with more schooling should not obscure the fact that total earnings from wage work were modest. Compared with workers in other occupations, even farm wage workers with the most years of school completed had low annual earnings; but compared with other members of the hired farm working force, they earned almost twice as much (about $2,300) during the year as did the functional illiterates (about $1,200)

About 7 out of 10 of all adult male regular farm wage workers (those who did at least 150 days of farm wage work during the year) had completed no more than a grade school education (table 6). Among regular workers with fewer than 9 years of school, there were no significant differences in the earnings reported by younger and by older workers.

SKILL LEVEL, EDUCATION, AND EARNINGS

Included among farm wage workers are persons who perform a variety of jobs, ranging from those requiring a minimum of skill to those requiring technical and supervisory abilities. In an attempt to determine the range of jobs performed and the earnings and characteristics of workers engaged in different jobs, several questions were asked concerning the kind of farm and nonfarm jobs held during 1961.

The inquiry on farm jobs related to categories of jobs at which the worker was employed for at least 25 days during the year. If more than one job was reported, the one appearing first in a list of 9 jobs, listed in presumed order of skill required, was considered the highest skilled farm job. The highest skilled farm job was not necessarily the one at which the worker was employed for the longest period during the year nor the one at which he earned the majority of his farm wages.

About a third of all male regular and seasonal workers reported hand or stoop labor as their highest skilled job and 31 percent reported that of tractor or truck driver (table 7). The major difference among the four educational categories was the comparatively high proportion (41 percent) of workers with a high school education who reported one of the three highest skilled jobs. In the South, and particularly among nonwhites, hand labor was more often reported as the highest skilled farm job than in the rest of the U. S.

Comparison of average daily farm wages received by workers in various skill-level categories shows that there was little difference in wages, except for the highest skill categories. Supervisors, repair and maintenancemen, and operators of self-propelled machinery averaged $8.75 per day of farm wage work, but the average daily wages of all lesser skilled jobs ranged between $5.70 and $6.55 (table 8).

Table 6.--Average days worked and wages earned by males 25 years old and over who did 150 days or more of farm wage work in 1961, by age and years of school completed, United States, 1961

Age and years of school completed	Number of male workers 1/	Farm and nonfarm wage work			Farm wage work		
		Days worked	Wages earned		Days worked	Wages earned	
			Per year	Per day		Per year	Per day
	Thousands	Number	Dollars	Dollars	Number	Dollars	Dollars
Total, 25 years old and over	476	283	2,279	8.05	275	2,184	7.95
0-8 years	331	281	1,989	7.10	274	1,904	6.95
9 and over	2/145	289	2,942	10.25	279	2,823	10.15
25-44	237	288	2,538	8.80	277	2,401	8.65
0-8	2/141	279	2,114	7.55	264	1,927	7.30
45 and over	239	277	2,024	7.30	273	1,970	7.20
0-8	190	282	1,895	6.70	281	1,886	6.70

1/ Excludes persons for whom years of school completed was not reported.

2/ Averages based on less than 150,000 persons.

Table 7.--Percentage distribution: Years of school completed by males who did 25 days or more of farm wage work in 1961, by highest skilled farm job, United States, and the South, by color

Highest skilled farm job	Years of school completed										
	United States					South					
	Total	0-4	5-8	9-11	12 and over	Total	0-4	5-8	9 and over	White	Nonwhite
Number (thousands) 1/	1,390	283	536	329	242	644	196	275	173	335	309
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Manager or foreman	7.9	2.8	7.5	6.0	17.5	6.3	3.2	4.4	12.6	11.1	1.0
Major machine repair	5.1	4.4	4.0	4.6	9.0	3.5	5.4	1.2	5.0	3.7	3.2
Operator of self-propelled machinery	8.2	5.8	8.2	5.4	14.7	6.2	6.2	6.2	6.3	6.2	6.3
Tractor or truck driver	30.8	26.8	31.5	33.5	30.3	27.1	30.2	26.5	24.4	23.9	30.4
Work with livestock or poultry	9.4	9.9	9.0	9.4	9.5	9.6	12.4	8.0	9.2	10.8	8.5
Operator of other machinery	1.6	2.2	.9	1.8	1.9	1.4	2.6	.7	1.2	1.1	1.7
Crew leader	.2	---	.6	---	---	---	---	---	---	---	---
Produce packer; grader	2.9	1.2	.9	7.0	4.0	1.6	---	1.2	4.1	1.5	1.6
Hand or stoop labor	32.2	44.9	35.7	30.2	12.4	43.2	38.0	51.8	35.3	39.5	47.3
Unclassifiable	1.7	2.0	1.7	2.1	.7	1.1	2.0	---	1.9	2.2	---

1/ Excludes workers for whom years of school completed was not reported.

Table 8.--Average days worked and wages earned by males who did 25 days or more of farm wage work in 1961, by skill level and years of school completed, United States, 1961

Skill level and years of school completed	Number of workers 1/	Farm and nonfarm wage work			Farm wage work			Percent with nonfarm wage work
		Days worked	Wages earned		Days worked	Wages earned		
			Per year	Per day worked		Per year	Per day worked	
	Thous.	No.	Dol.	Dol.	No.	Dol.	Dol.	Pct.
Supervisor, repair and maintenance, operator of self-propelled machine	298	265	2,364	8.95	241	2,115	8.75	23.9
0-8 years	2/146	273	1,992	7.30	258	1,807	7.00	18.3
9 and over	152	257	2,721	10.40	225	2,430	10.70	29.2
Tractor or truck driver	428	186	1,183	6.35	159	952	6.00	29.6
0-8	244	193	1,181	6.10	176	1,035	5.90	23.3
9 and over	184	175	1,185	6.75	136	841	6.15	38.0
Packer or grader, livestock and poultry, and all other machine operators	193	197	1,194	6.05	172	980	5.70	22.6
0-8	96	---	---	---	---	---	---	---
9 and over	97	---	---	---	---	---	---	---
Hand or stoop labor	448	111	728	6.60	94	615	6.55	27.2
0-8	318	114	775	6.75	100	664	6.65	22.3
9 and over	2/130	95	572	6.00	72	448	6.20	37.3

1/ Excludes persons for whom years of school completed or for whom skill level was not reported.
2/ Averages based on less than 150,000 persons.

Skill level refers to the highest skilled farm job done for 25 days or more in 1961.

Within the highest skill-level categories, workers with 9 or more years of schooling earned about $4.00 a day more than did workers with less than 9 years of school completed. Within the other skill-level categories differences in average daily wages were minor and not significant; however, there were substantial differences in annual earnings because workers reporting hand or stoop labor had considerably fewer days of work than higher skilled workers. The indicator of skill level of farm jobs is a limited one, but skill level is associated with substantial differences in earnings and in number of days worked.

One result, for which there is no ready explanation, is that within each skill-level category workers in the lower educational category averaged more days of total and farm wage work than those with 9 years or more of school.

Information on region of residence in December 1961 and color of the worker, plus data on highest skilled farm job, permit an examination of wage differentials between southern whites and nonwhites employed at jobs requiring a similar level of skill.

There were marked regional differences in the educational attainment of male regular and seasonal farm wage workers (table 9). 10/ Workers in the South averaged about 3 years less schooling than workers residing in the North, and about 2 years less than those in the West. Three out of 10 of the 644,000 Southern workers had completed fewer than 5 years of school, and 36 percent of nonwhite workers in the South were functionally illiterate.

Table 9.--Percentage distribution: Years of school completed by males who did 25 days or more of farm wage work in 1961, by region and color for the South, 1961

Region	Male workers 1/		Years of school completed					
			Total	0-4	5-8	9-11	12 or more	Median
	Thous.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Yrs.
Total	1,390	100.0	100	20.3	38.5	23.8	17.4	8.1
North	412	29.6	100	5.6	36.9	31.9	25.6	9.7
South	644	46.3	100	30.4	42.8	17.8	9.0	6.8
White	335	52.0	100	25.2	45.8	18.5	10.5	7.2
Nonwhite	309	48.0	100	36.1	39.5	16.9	7.5	6.4
West	335	24.1	100	19.0	32.3	25.2	23.5	8.8

1/ Excludes persons for whom years of school completed was not reported.

10/ Although region refers to residence in December 1961, most persons did farm wage work in the same region in which they were residing.

Among male regular and seasonal workers in the South who reported their highest skilled job to be other than that of hand or stoop labor, average daily farm wages were lower for nonwhites than for whites (table 10). Evidence that these wage differentials were not due to differences in educational level or skill level of the worker can be derived from an examination of the wages and earnings of whites and nonwhites whose highest skilled farm job was that of hand or stoop labor and who did no other farm job for as many as 25 days during 1961. There was little difference in the educational level of whites and nonwhites in the hand or stoop labor category and, as in the case of workers in the rest of the U. S., these workers were only partly employed during the year. Average daily farm wages of nonwhites were about $1.00 a day lower than those received by whites, even though both were engaged in hand or stoop labor. The small number of cases limits analysis, but wage differences between whites and nonwhites do not appear to be associated with differences in education of the worker or the skill requirements of the job. White-nonwhite differences in average daily wages may reflect differences in hours worked per day, variations in wage rates associated with work with various crops at various times of the year, the presence of a surplus of nonwhite labor available for employment at low wages, the selection of whites for higher-skilled and better-paying farm jobs, or a combination of these and other factors.

NONFARM EMPLOYMENT

About 345,000 (25 percent) of all males who did 25 days or more of farm wage work in 1961 also reported nonfarm wage work. To obtain information on the type of nonfarm job, the worker was asked, "What is the highest paying type of nonfarm work you have done this year?" About 38 percent of all male regular and seasonal farm wage workers reported their highest paid nonfarm job as that of nonfarm laborer (table 11). 11/ Second in frequency (25 percent) was the major occupation group of operatives and kindred workers, mostly semi-skilled occupations. Significantly more males with 9 or more years of school than those with less than 9 years of school reported their highest-paid nonfarm job to be in one of the white-collar occupations.

Comparisons of wages and earnings are possible for only two broad nonfarm occupational categories. White-collar workers, craftsmen and kindred workers, and operatives and kindred workers are compared with service workers and nonfarm laborers (table 12). The first category includes occupations generally assumed to require more formal schooling, to pay higher wages, and to have a higher status than occupations of service workers or nonfarm laborers. This assumption is borne out by the data in table 11 which show that about 60 percent of workers whose highest-paid nonfarm job was in one of the higher status occupations had completed 9 or more years of school compared with about 40 percent of those whose highest paid nonfarm job was that of service worker or nonfarm laborer. Males in the higher status nonfarm jobs earned about $1.50 more per day from nonfarm work than did service workers and nonfarm laborers, and, because of substantially more days of nonfarm work, had average annual nonfarm earnings about $500 higher than those of service workers and nonfarm laborers.

11/ These data refer only to workers who reported on nonfarm employment and on educational attainment. The highest paid nonfarm job is not necessarily the one which was held for the longest time in 1961. See the section Definitions and Explanations.

Table 10.--Selected data on education and earnings: Males who did 25 days or more of farm wage work in 1961, by color and skill level, South only, 1961

South: color and skill level	Number 1/	Years of school completed			Farm and nonfarm wage work			Farm wage work		
		0-4	12 or more	Median	Days worked	Wages earned		Days worked	Wages earned	
						Per year	Per day worked		Per year	Per day worked
	Thous.	Pct.	Pct.	Yrs.	No.	Dol.	Dol.	No.	Dol.	Dol.
All skill levels	635	30.2	9.0	6.8	164	937	5.70	147	812	5.55
White	327	24.6	10.7	7.2	172	1,122	6.55	152	948	6.25
Nonwhite	308	36.2	7.1	6.2	153	740	4.85	141	666	4.70
Hand or stoop labor	278	26.8	7.4	6.8	96	551	5.55	82	455	5.55
White	2/132	26.8	5.4	6.7	91	595	6.50	76	461	6.10
Nonwhite	2/146	26.8	9.2	6.9	99	511	5.10	87	449	5.15
All other skill levels	357	32.9	10.2	6.8	218	1,237	5.65	197	1,090	5.55
White	195	23.1	14.2	7.6	227	1,479	6.55	203	1,279	6.30
Nonwhite	162	44.6	5.3	5.6	208	946	4.55	190	862	4.55

1/ Excludes persons for whom years of school completed or for whom skill level was not reported.

2/ Averages based on less than 150,000 persons.

Skill level refers to the highest skilled farm job done for 25 days or more in 1961.

Table 11.--Percentage distribution: Years of school completed by males who did 25 days or more of farm wage work by highest paid nonfarm job United States, 1961

Highest paid nonfarm job	Males 1/	Years of school completed	
		0-8	9 and over
Total ... thousands	345	168	177
Percent	100.0	100.0	100.0
Professional, technical and kindred workers; managers, officials, and proprietors (excluding farm)	4.0	2.0	5.8
Clerical and sales workers	6.3	4.0	8.5
Craftsmen, foremen, and kindred workers	14.7	15.7	13.7
Operatives and kindred workers	24.6	19.7	29.3
Private household workers	1.4	1.1	1.8
Service workers, except private household	11.0	14.8	7.4
Laborers, except farm and mine	38.0	42.7	33.5

1/ Excludes workers for whom years of school completed or nonfarm occupation was not reported.

Table 12.--Average days worked and wages earned by males who did 25 days or more of farm wage work by occupation category of highest paid nonfarm job, United States, 1961

Occupation category of highest paid nonfarm job	Male workers 1/		Nonfarm wage work			Farm wage work		
	No. (thous.)	Percent with 9 or more years of school	Days worked	Wages earned: Per year	Wages earned: Per day worked	Days worked	Wages earned: Per year	Wages earned: Per day worked
			No.	Dol.	Dol.	No.	Dol.	Dol.
White collar, craftsmen, operatives	171	59.3	108	1,027	9.50	104	756	7.30
Service workers and nonfarm laborers	174	43.4	64	510	8.00	99	658	6.65

1/ Excludes workers for whom years of school completed or nonfarm occupation was not reported.

Both categories of workers averaged about the same number of days of farm wage work, but males who held higher status nonfarm jobs also earned more per day of farm wage work than did males whose highest paid nonfarm job was that of service worker or laborer. For males with higher status nonfarm jobs, 58 percent of their total earnings was from nonfarm employment; whereas for males employed as nonfarm service workers or laborers, only 43 percent of their total earnings was from nonfarm employment.

The limited number of cases precludes analysis of other factors, such as age, which are related to occupation and earnings, but the data do support the suggestion that a higher level of educational attainment is associated with employment in nonfarm occupations which offer fairly steady employment at comparatively high wages. Nonfarm employment in higher status jobs does not appear to reduce the average number of days of farm employment, but does seem to reduce economic dependence on farm wage work.

DEFINITIONS AND EXPLANATIONS

Source of data. Data for this report were collected for the Economic Research Service by the Bureau of the Census in conjunction with the December 1961 Current Population Survey (CPS). The CPS sample consists of about 35,000 households in 333 areas throughout the U. S. 12/

Comparability with other data. Estimates in this report refer to persons 14 years of age and over who were in the civilian noninstitutional population of the United States in December 1961. Estimates of the number of farm wage workers derived from the December 1961 CPS are not comparable with figures in the decennial census, those contained in the Annual Report on the Labor Force, or those published in the Farm Labor Series of the U. S. Department of Agriculture. Unlike the decennial census and Annual Report on the Labor Force where "occupation" refers to the primary job held during a specified week, estimates in this report refer to persons who did farm wage work at any time during the year. Estimates contained in the Farm Labor Series are based on monthly reports of farmers concerning the workers hired and the same person may be reported more than once. In addition, the Farm Labor Series has no minimum age criterion, whereas data in this report are limited to persons 14 years old and over.

The minor differences between the estimates in this bulletin and those in the Hired Farm Working Force of 1961 are due to the exclusion from this report of workers for whom years of school completed was not reported.

Farm wage workers are persons 14 years old and over in the civilian noninstitutional population of the U. S. in December 1961 who did any farm work for cash wages at any time in 1961, even if only for a few days. Since almost all foreign nationals imported for seasonal farm wage work during 1961 had returned to their countries by December 1961, they would not be members of the U. S. civilian noninstitutional population and would not be included in the survey.

12/ For a description of the Current Population Survey, see: (8). For a detailed discussion of the CPS and other sources of information on employment and unemployment, see: (5).

Migratory farm wage workers are those for whom a "yes" answer was given to the question, "Some farm workers leave home to harvest crops or do other seasonal farm work in a different county. Did....do this in 1961?" Enumerators were instructed: (1) to consider as migratory workers (a) persons who were reported to have left their homes temporarily at least over night to do farm wage work in another county, with the expectation of returning home; and (b) persons who had no usual place of residence if they did farm wage work in two or more counties during 1961; (2) to consider as nonmigratory workers (a) persons who were reported as farm wage workers in the county for part of the year and who made a more or less permanent move to another county during the year and also did farm wage work in the second county; and (b) persons who commuted daily across the county line to do farm wage work and returned home each night.

Regular and seasonal farm wage workers are those who worked 25 days or more at farm wage work during the year. Persons who worked 150 days or more are considered regular workers. This usage differs from that of the Census of Agriculture where "seasonal workers" refers to persons employed on one farm for less than 150 days during the year, and "regular workers" refers to those employed on one farm for 150 days or more during the year.

Casual farm wage workers are persons who did less than 25 days of farm wage work during the year.

Days of farm and nonfarm wage work are days on which any farm or nonfarm wage work was reported. The work may have been for all or only part of a day.

Earnings from farm and nonfarm wage work include total cash wages paid for farm work and nonfarm cash wages and salaries. Estimates of earnings do not include estimates of the value of perquisites received in connection with farm work or of the value of fringe benefits received in connection with nonfarm work.

Skill level of farm job of regular and seasonal farm wage workers is a classification, by skill requirements, of farm jobs held for at least 25 days in 1961. The interview schedule included a list of 9 categories of farm jobs ranked in descending order of skill requirements. The list was developed in consultation with specialists in the field of farm labor. If a worker reported 25 days or more at more than one type of farm wage work, the type of job appearing first on the list was considered to be the highest skilled job. Enumerators were instructed to obtain this information from the worker himself whenever possible.

Highest paid nonfarm job of regular and seasonal workers was the job reported in response to the question, "What is the highest paying type of nonfarm work you have done this year?" Enumerators were instructed to obtain this information from the worker himself whenever possible. No information was obtained on the number of days worked at the highest paid nonfarm job. Data on the highest paid nonfarm job may refer to a job held for only a part of the year and do not necessarily refer to the nonfarm occupation in which the worker was employed for the longest time during the year.

Educational attainment refers to the highest grade (or year) of school the worker completed. Information in this report is restricted to workers for whom information on years of school completed was reported--about 96 percent of all workers.

Age of the worker is age on his last birthday.

Nonwhite farm wage workers include Negroes, Indians, Japanese, Chinese, and other nonwhite races. About 95 percent of all nonwhite farm wage workers were Negroes.

Reliability of the estimates. Since the figures are based on sample data, they are subject to sampling variability. The standard error is primarily a measure of sampling variability. The standard error as calculated for this report also partially measures the effect of response variance but does not reflect any systematic biases in the data. The chances are 68 out of 100 that the difference due to sampling variability between an estimate and the figure that would have been obtained from a complete enumeration is less than the standard error. The chances are about 95 out of 100 that the difference is less than twice the standard error and about 99 out of 100 that it is less than 2-1/2 times the standard error. These estimates of standard errors of percentages should be interpreted as providing an indication of the order of magnitude of the standard errors rather than as providing a precise standard error for any specific item.

The reliability of an estimated percentage, computed by using sample data for both numerator and denominator, depends upon the size of the percentage and the size of the total on which the percentage is based. Generally, estimated percentages are relatively more reliable than the corresponding absolute estimates of the numerator of the percentage, particularly if the percentage is high.

Table 13 contains the standard error of level estimates of the number of persons in a given class who did farm wage work.

Table 13.--Standard error of level of estimates of persons who did farm wage work, December 1961

(68 chances out of 100)

Size of estimate (000)	Standard error (000)
50	15
100	22
250	35
500	50
750	63
1,000	70
2,000	115
3,000	150

Table 14 shows the standard error of estimated percentages for different sizes of the base of the percentage for characteristics of farm wage workers.

Table 14.--Standard error of estimated percentage of number of farm wage workers, December 1961

(68 chances out of 100)

Estimated percentage	Base of percentage (000)				
	100	250	500	1,000	3,000
2 or 98	3.0	2.1	1.4	1.0	.6
5 or 95	4.7	3.2	2.1	1.5	.9
10 or 90	6.5	4.4	2.9	2.1	1.2
25 or 75	9.4	6.4	4.2	3.0	1.7
50	10.8	7.4	4.8	3.4	2.0

Table 5 in this report shows that there were about 825,000 males who did 25 days or more of farm wage work in 1961. Table 13 shows that the standard error of this estimate is approximately 63,000. The chances are about 68 in 100 that the figure obtained from a complete census would have differed by less than 63,000 from the sample estimate, and about 95 out of 100 that the difference would be less than 163,000.

About 24 percent of these males reported nonfarm wage work. Linear interpretation in table 14 shows that the standard error of 24 percent is about 3.8 percent. Accordingly, the chances are about 68 out of 100 that a complete census would show a percent greater than 21.4 percent and less than 28.0 percent.

Comparability with other estimates.--As table 15 shows, estimates of the educational attainment of the 1961 hired farm working force are in close agreement with those relating to the 1960 hired farm working force.

Table 15.--Percentage distribution of years of school completed by farm wage workers, United States, 1960 and 1961

Year	Years of school completed					
	Total	0-4	5-8	9-11	12 or more	Median years
All farm wage workers						
1960	100	15.3	42.5	28.1	14.1	8.3
1961	100	17.3	40.5	26.7	15.5	8.5

Part of this similarity in educational attainment, as well as in other social and demographic characteristics, is due to the fact that about one quarter of the households included in the February 1961 CPS were also included in the December CPS. The similarity also is an indication of the reliability of the data and is consistent with the suggestion that the hired farm working force in a given year is drawn from a population with a low average level of formal schooling.

A NOTE ON THE TERM "FUNCTIONAL ILLITERATE"

"Functional illiterate" is used as a brief designation for persons who have completed fewer than 5 years of school, including those with no years of school completed. Lack of formal education must not be equated with lack of native ability or intelligence, but it is generally assumed that persons with fewer than 5 years of schooling are thereby limited to jobs requiring only a minimal amount of formal schooling. Limited occupational opportunities, in turn, limit incomes from employment and influence other aspects of careers. In the absence of information on measures of intelligence, the criterion of educational attainment can be used as an indication of capacity to perform jobs for which educational requirements are known.

There is a fairly close relationship between functional illiteracy and the ability to read and write. In March 1959, for example, the Bureau of the Census estimated that "About 74 percent of the population (14 years old and over) with no school years completed cannot read and write in any language, and the comparable percentages are 59 percent of those with only one year of school, 33 percent of those with two years of school, and 17 percent of those with three years. The rate drops off sharply to 5 percent among those having four years of school and 2 percent of the groups with 5 years" (9, p. 3). In March 1959, about 33 percent of all males 25 years old and over with fewer than 5 years of school completed, and 6 percent with 4 years of school, could not read and write in any language (9, table 7).

Classification of persons with fewer than 5 years of school completed as functional illiterates is consistent with current usage (7, p. 195) and with the broad classifications of educational attainment used by the Bureau of the Census.

The term seems to have originated from the literacy training programs conducted by the Civilian Conservation Corps from 1933 to 1942 and by the Armed Forces in the early years of World War II. The CCC classified as illiterate men with no more than three years of school and the Army considered men with less than fourth grade reading ability to be functional illiterates (2, pp. 3-4, 12).

As used in this report, the term includes among functional illiterates persons who have completed four years of school who would not have been considered functional illiterates under the definition employed by the CCC and the Armed Forces. In 1943, "....the criterion for acceptance into the Army was made 'intelligence' rather than 'literacy' " (2, p. 21)

Most functional illiterates are at a disadvantage in a labor market in which a high school education has become the norm, but as experience with literacy training programs has demonstrated, a large proportion of functional illiterates can be taught, in a short period of time, the skills required for satisfactory job performance. 13/

13/ Fattu, et. al. (2, p. 59) report that only 10 percent of men in the Army literacy training program had failed to reach the fourth grade reading level within 16 weeks, and that the average illiterate learned to read materials of fourth grade difficulty within 8 weeks. Illiteracy is also discussed (4, pp. 17-18).

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